UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,837	04/16/2001	Mark Vange	CIRC027	4183

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EXAMINER
NEURAUTER, GEORGE C

ART UNIT	PAPER NUMBER
2143	

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>21 September 2005</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5 and 7-22* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 7-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

Claims 1-5 and 7-22 are currently presented and have been examined.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 21 September 2005 has been entered.

Response to Arguments

Applicant's arguments filed 21 September 2005 have been fully considered but they are not persuasive.

The Applicant argues that "RFC 1034" does not teach or suggest funneling data requests through large connections. It is noted that these features upon which applicant relies are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The Applicant also argues that "RFC 1034" or Farber do not teach or suggest wherein the one or more data storage devices are configured as a storage area network or wherein the data storage devices provide scalable data service functionality. As noted previously by the Examiner, the nominal recitation of wherein the devices are configured as a storage area network holds little patentable weight since the specific functionality of how these devices are configured as opposed to the configuration of devices as disclosed in "RFC 1034". Therefore, one of ordinary skill in the art would expect the system of "RFC 1034" to perform equally as well as the claimed invention since the steps which the elements perform are able to stand alone. Configuring storage devices as a storage area network when the claims and "RFC 1034" already specifically disclose that the devices are connected together in a network is not sufficient enough to patentably distinguish the claimed invention from the teachings of "RFC 1034". The same reasoning is applied to the recitation wherein the devices provide scalable data service functionality. Again, absent any specific functionality which allows the devices to provide scalable data service functionality, a nominal recitation of "scalable data service functionality" will not distinguish the claimed invention from

the disclosures of "RFC 1034". Therefore, the claims are not in condition for allowance.

Claim Interpretation

The element "token" defined on page 23, lines 3-10 of the specification and recited in claims 7-8, 11-13, 18, and 19 will be given its broadest reasonable interpretation and will be interpreted by the Examiner as a "domain name" and "URL" that is consistent with the disclosures of the specification and the interpretation that those skilled in the art would reach. See MPEP § 2111.

The Applicant has not provided a clear definition for the term "resource locator" recited in claim 9 within the specification. Therefore, the Examiner will interpret this element by its plain meaning as if the term was interpreted by one of ordinary skill in the art. See MPEP § 2111.01.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-5 and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Request for Comments (RFC) 1034: Domain Names – Concepts and Facilities" by Mockapetris, P. ("RFC 1034").

Regarding claim 1, "RFC 1034" discloses a data storage

system (page 6, section 2.4 "Elements of the DNS") comprising:

a communication network (referred to throughout the

reference as "domain" or "local network" or "organization");

a client application ("user program") coupled to the

network and generating an access request for stored data

("resource" or "desired information"; page 29, section 5.1

"Introduction", paragraph 1), wherein the client application

lacks a priori knowledge of the location of the requested data

(page 3, section 2.2 "DNS design goals", specifically the text

"We should be able to use names to retrieve host address,

mailbox data, and other as yet undetermined information.");

an intermediary server ("resolver", more specifically "stub

resolver") coupled to the network to receive the request (page

29, section 5.1 Introduction", paragraph 1; page 32, section

5.3.1 "Stub resolvers");

one or more data storage devices ("hosts") accessible

through the intermediary server and having a plurality of data

units, including the stored data that is requested by the client

application, stored at selected locations therein (page 6,

section 2.4 "Elements of the DNS", paragraph "The DOMAIN NAME

SPACE and..."; page 29, section 5.1 Introduction", paragraph 1);

a storage server ("name server") having knowledge of the

location of the data units in the storage devices and having an

interface for communicating with the intermediary server (page

6, section 2.4 "Elements of the DNS", paragraphs "NAME SERVERS"

and "RESOLVERS", specifically in "RESOLVERS", "RESOLVERS are

programs that extract information from name servers...");

processes within the intermediary server responsive to a

received data access request for communicating with the storage

server to obtain knowledge about the location of requested data

(page 6, section 2.4 "Elements of the DNS", paragraphs "NAME

SERVERS" and "RESOLVERS", specifically in "NAME SERVERS", "NAME

SERVERS" are server programs which hold information about the

domain tree's structure and set information" and specifically in

"RESOLVERS", "RESOLVERS are programs that extract information

from name servers in response to client requests"); and

processes within the intermediary server for obtaining the

data from the specific location and serving the data to the

requesting client application (page 29, section 5.1

Introduction", paragraph 1, specifically "...a resolver receives

a request from a user program...and returns the desired

information...".

"RFC 1034" does not disclose wherein at least some of the

storage device are configured as a storage area network or that

the storage devices provide scalable data service functionality.

It would have been obvious to one skilled in the art at the

time the invention was made to use a storage area network and to

provide scalable data service functionality because the

Applicant has not disclosed that using the limitation

undisclosed in "RFC 1034" provides any sort of an advantage, is

used of a particular purpose, or solves a stated problem. One of

ordinary skill in the art, furthermore, would have expected

Applicant's invention to perform equally well with the Internet

described in "RFC 1034" as recited in the claim because data

transferred between a client and a storage device traverses the

network regardless of the type of storage type used or the type

of data service functions provided absent any specific

functionality to the contrary.

Regarding claim 2, "RFC 1034" discloses the system of claim

1 wherein the data is returned such that the client remains

unaware of the specific location of the data. (page 6, section

2.4 "Elements of the DNS", paragraph "From the user's point of

view...", specifically "From the user's point of view, the

domain system is accessed through a simple procedure...to a

local resolver. The domain space consists of a single tree and

the user can request information from any section of the tree.")

Regarding claim 3, "RFC 1034" discloses the system of claim

1 wherein the intermediary server has a lower latency connection

to the client application than does the storage server. (page

29, section 5.1 "Introduction", paragraphs 2 and 3, specifically

"Because a resolver may need to consult several name servers, or

may have the requested information in a local cache, the amount

of time that a resolver can take to complete can vary quite a

bit..." and "A very important goal of the resolver is to

eliminate network delay and name server load...")

Regarding claim 4, "RFC 1034" discloses the system of claim

1 wherein at least some of the storage devices comprise direct

attached storage for the intermediary server. (page 6, section

2.4 "Elements of the DNS", paragraph "The DOMAIN NAME SPACE

and..."; page 29, section 5.1 Introduction", paragraph 1)

Regarding claim 5, "RFC 1034" discloses the system of claim

1 wherein at least some of the storage devices comprise network

attached storage. (page 6, section 2.4 "Elements of the DNS",

paragraph "The DOMAIN NAME SPACE and..."; page 29, section 5.1

Introduction", paragraph 1)

Regarding claim 7, "RFC 1034" discloses the system of claim

1 wherein the access request is represented by a token ("host

name" or "domain name"). (page 6, section 2.4 "Elements of the

DNS", specifically paragraph "The DOMAIN NAME SPACE..."; pages

29-30, section 5.2.1 "Typical functions", specifically

subsection "1. Host name to host address translation")

Regarding claim 8, "RFC 1034" discloses the system of claim

1 wherein the processes for communicating with the storage

server further comprise transmission of a token representing the

requested data. (page 6, section 2.4 "Elements of the DNS",

specifically paragraph "The DOMAIN NAME SPACE...", specifically

"A query...describes the type of resource information that is

desired")

Regarding claim 9, "RFC 1034" discloses the system of claim

1 wherein the processes for communicating with the storage

server further comprise processes for receiving a resource

locator from the storage server. (page 6, section 2.4 "Elements

of the DNS", specifically paragraph "The DOMAIN NAME SPACE...",

specifically "...queries for address resources return Internet

host addresses")

Regarding claim 10, "RFC 1034" discloses the system of

claim 1 wherein the processes for communicating with the storage

server further comprise processes for receiving a file name and

file path from the intermediary server. (page 6, section 2.4

"Elements of the DNS", specifically paragraph "The DOMAIN NAME

SPACE...", specifically "A query...describes the type of

resource information that is desired"; page 29, section 5.1

"Introduction", specifically "In the simplest case, a resolver

receives a request from a user program (e.g...FTP)...and returns

the desired information in a form in a form compatible with the

local host's data formats)

    Regarding claim 11, "RFC 1034" discloses a method for

managing on-network data storage comprising the acts of:

    providing a communication network; (referred to throughout

the reference as "domain" or "local network" or "organization")

    receiving requests for data within an intermediary server

from a plurality of external client applications coupled to the

network; (page 29, section 5.1 Introduction", paragraph 1; page

32, section 5.3.1 "Stub resolvers")

    storing units of data in one or more data storage devices

accessible to the intermediary server; (page 6, section 2.4

"Elements of the DNS", paragraph "The DOMAIN NAME SPACE and...";

page 29, section 5.1 Introduction", paragraph 1)

    associating each request with a token representing the

request; (page 6, section 2.4 "Elements of the DNS",

specifically paragraph "The DOMAIN NAME SPACE..."; pages 29-30,

section 5.2.1 "Typical functions", specifically subsection "1.

Host name to host address translation")

     sending the token to a storage server coupled to the

network and having an interface for communicating with the

intermediary server; (page 6, section 2.4 "Elements of the DNS",

specifically paragraph "The DOMAIN NAME SPACE...", specifically

"A query...describes the type of resource information that is

desired")

     causing the storage server to return specific location

information corresponding to the request associated with the

received token; (page 6, section 2.4 "Elements of the DNS",

specifically paragraph "The DOMAIN NAME SPACE...", specifically

"...queries for address resources return Internet host

addresses")

     causing the intermediary server to access the data storage

mechanism using the specific location information to retrieve

data at the specific location; and delivering the retrieved data

to the client application that generated the request. (page 6,

section 2.4 "Elements of the DNS", specifically paragraph "The

DOMAIN NAME SPACE...", specifically "A query...describes the

type of resource information that is desired"; page 29, section

5.1 "Introduction", specifically "In the simplest case, a

resolver receives a request from a user program

(e.g...FTP)...and returns the desired information in a form in a

form compatible with the local host's data formats)

"RFC 1034" does not disclose wherein at least some of the

storage device are configured as a storage area network or that

the storage devices provide scalable data service functionality.

It would have been obvious to one skilled in the art at the

time the invention was made to use a storage area network and to

provide scalable data service functionality because the

Applicant has not disclosed that using the limitation

undisclosed in "RFC 1034" provides any sort of an advantage, is

used of a particular purpose, or solves a stated problem. One of

ordinary skill in the art, furthermore, would have expected

Applicant's invention to perform equally well with the Internet

described in "RFC 1034" as recited in the claim because data

transferred between a client and a storage device traverses the

network regardless of the type of storage type used or the type

of data service functions provided absent any specific

functionality to the contrary.

1.   Claims 12-19 are rejected under 35 U.S.C. 103(a) as being

unpatentable over US Patent 6 185 598 B1 to Farber et al.

Regarding claim 12, Farber discloses a method for

transferring data between network connected computers comprising

the acts of:

storing a data object ("resource") at a specific location

in a network-connected storage mechanism ("origin server");

(column 4, lines 40-48)

transmitting a token representing the data object from a

first network-connected computer ("client") to an intermediary

computer ("reflector"); (column 2, line 65-column 3, line 5)

in the intermediary computer, using the token to identify

the specific storage location of the data object; (column 3,

lines 5-10)

causing the storage mechanism to transfer the data object

to a second network-connected computer ("repeater"). (column 3,

lines 18-23)

Farber does not disclose wherein at least some of the

storage device are configured as a storage area network or that

the storage devices provide scalable data service functionality.

It would have been obvious to one skilled in the art at the

time the invention was made to use a storage area network and to

provide scalable data service functionality because the

Applicant has not disclosed that using the limitation

undisclosed in Farber provides any sort of an advantage, is used

of a particular purpose, or solves a stated problem. One of

ordinary skill in the art, furthermore, would have expected

Applicant's invention to perform equally well with the Internet

described in Farber as recited in the claim because data

transferred between a client and a storage device traverses the

network regardless of the type of storage type used or the type

of data service functions provided absent any specific

functionality to the contrary.

Regarding claim 13, Farber discloses the method of claim 12

wherein the step of sending the token further comprises sending

an identification of the second network-connected computer.

(column 3, lines 10-16)

Regarding claim 14, Farber discloses the method of claim 12

wherein the act of transferring the data object comprises

transferring the data object to a plurality of network-connected

computers. (column 3, lines 35-50)

Regarding claim 15, Farber discloses the method of claim 12

further comprising:

storing copies of the data object at multiple

network-connected storage mechanisms; (column 3, lines 35-50)

using the intermediary computer to select one of the

multiple network-connected storage mechanisms; (column 3, lines

5-10) and

causing the selected network-connected storage mechanism to

transfer the data object to a second network-connected computer.

(column 3, lines 35-50, specifically lines 46-50)

Farber does not expressly disclose wherein the mechanisms
mechanisms includes a storage area network.

Claim 15 is rejected since the motivations regarding the
obviousness of claim 12 also apply to claim 15.

Regarding claim 16, Farber discloses the method of claim 12
wherein the step of causing the storage mechanism to transfer
the data object to a second network-connected computer
comprises:

transferring the data object to a front-end server
topologically close to the second network-connected computer;
and transferring the data object from the front-end server to
the second network-connected computer. (column 3, lines 35-50,
specifically lines 46-50)

Regarding claim 17, Farber discloses the method of claim 12
wherein the data object at the specific location is referred to
as a primary data object, the method further comprising:

causing the network-connected storage mechanism to
proactively redistribut data objects by transferring in addition
to the primary data object, one or more data objects that are
sequentially related to the primary data object. (column 4,
lines 29-32; column 10, lines 39-52)

Farber does not expressly disclose wherein the mechanisms
mechanisms includes a storage area network.

Claim 17 is rejected since the motivations regarding the obviousness of claim 12 also apply to claim 17.

Regarding claim 18, Farber discloses a data distribution service comprising:

one or more data storage mechanisms holding a plurality of data objects at specific non-public locations; (column 4, lines 40-48)

an interface for receiving tokens ("URL"), the tokens associated with particular ones of the data objects and the tokens lacking specific location information indicating the locations of the data objects in the one or more data storage mechanisms (column 3, lines 51-53; column 5, line 64-column 6, line 5; column 6, lines 40-56); and

a means for supplying the specific nonpublic locations of the data objects associated with the received tokens. (column 6, lines 40-56)

Farber does not expressly disclose wherein the mechanisms includes a storage area network.

Claim 15 is rejected since the motivations regarding the obviousness of claim 12 also apply to claim 15.

Regarding claim 19, Farber discloses a method for version control of a data object comprising:

receiving a token representing a first version of a data

object; (column 10, lines 13-67, specifically lines 21-25)

using the token to identify a second version of the data

object; (column 4, lines 29-32; column 10, lines 13-67,

specifically lines 39-52) and

identifying a specific storage location ("origin server")

of the second version data object in response to the received

token. (column 10, lines 13-67, specifically lines 39-52)

Farber does not expressly disclose a storage area network.

Claim 17 is rejected since the motivations regarding the

obviousness of claim 12 also apply to claim 17.
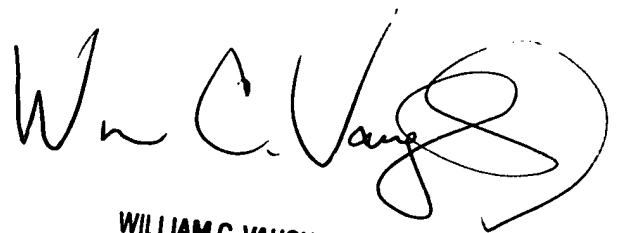
Conclusion

Any inquiry concerning this communication or earlier

communications from the examiner should be directed to George C.

Neurauter, Jr. whose telephone number is (571) 272-3918. The

examiner can normally be reached on Monday through Friday from

9AM to 5:30PM Eastern.

If attempts to reach the examiner by telephone are

unsuccessful, the examiner's supervisor, David Wiley can be

reached on (571) 272-3923. The fax phone number for the

organization where this application or proceeding is assigned is

571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gcn

WILLIAM C. VAUGHN, JR.
PRIMARY EXAMINER